

AP a monitoring block for monitoring a successive  $L_p$  term, while changing a value of a second term  $S_p$  until a target call blocking probability is satisfied during the second term  $S_p$  which is longer than or equal to the initial  $L_p$  term and includes the initial  $L_p$  term.

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### **REMARKS**

Reconsideration of all grounds of rejection and allowance of the pending claims, as respectfully requested with regard to the above amendments and the following remarks.

#### **Summary of the Rejections:**

(1) Claims 1-26 stand rejected under 35 U.S.C. §112, first paragraph as allegedly being unsupported by the specification.

#### **Examiner's Opinion:**

The Examiner alleges that with regard to claims 1,5,9,13 17 and 22 the recited phrase "wherein a mobile station adaptively adjusts the admission threshold for determining whether to admit or drop a handoff call requested for a cell adjacent to one of the cells in communication with the mobile station" is not supported in the specification, as he alleged that the specification only discloses an adaptive algorithm to adjust admission threshold based on monitored handoff dropping in each cell.

#### **Applicant's Traversal:**

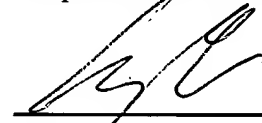
Applicants have amended claims 1,5,9,13,17 and 22 to clarify the claimed invention by reciting that the "base station controller", not the actual mobile station (i.e. telephone) adaptively adjusts the

admission threshold, as shown in Figs. 1A and 1B, and described throughout the specification. We do not think that the actual mobile station (i.e. telephone) is involved in the adaptive adjustment of the admission threshold, other than it being counted as a call requiring a certain QoS from the network.

Furthermore, the base station controller adaptively adjusts the admission threshold for determining whether to admit or drop a handoff call requested "*from* a cell adjacent to one of the cells in communication with the mobile station" rather than the instantly recited "*for* a cell adjacent..." The cell that is adjacent to the cell in communication with the mobile station must decide whether to admit or drop a handoff call from the cell in communication with the mobile station.

Should the Examiner deem that there are any issues which may be best resolved by telephone, please contact Applicant's undersigned representative at the number listed below. If there are any fees due and owing, please charge Deposit Account No. 502-470.

Respectfully submitted,

  
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Date: March 14, 2003

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Steven Cha, Reg. No. 44,069  
(Name of Registered Representative)

 3/14/03  
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(Signature and Date)



**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS**

Please amend the claims as follows:

1. (Amended) A method for adaptively adjusting an admission threshold in a wireless network including a plurality of cells, wherein **[one of] a [mobile] base station controller associated with a particular cell of the plurality of cells [or a mobile switching center (MSC)]** adaptively adjusts the admission threshold for determining whether to admit or drop a handoff call requested **[for]** **from** a cell adjacent to one of the cells in communication with **[the] a** mobile station, to satisfy a target handoff dropping probability for guaranteeing a quality of service (QoS), the method comprising the steps of:

(a) monitoring a quantity of handoff drops versus a quantity of handoff calls occurring for an initial  $L_p$  term;

(b) adjusting the admission threshold according to a result of the initial  $L_p$  term monitored in step (a); and

(c) repeating the steps (a) and (b) for a successive  $L_p$  term, while changing a value of a second term  $S_p$  until the target handoff dropping probability is satisfied during the successive  $L_p$  term, which is longer than or equal to the initial  $L_p$  term and includes the initial  $L_p$  term.

5. (Amended) An apparatus for adaptively adjusting an admission threshold in a wireless network including a plurality of cells, wherein **[one of] a [mobile] base station controller associated**

with a particular cell of the plurality of cells [or a mobile switching center (MSC)] adaptively adjusts the admission threshold for determining whether to admit or drop a handoff call requested [for] from a cell adjacent to one of the cells in communication with [the] a mobile station, to satisfy a target handoff dropping probability for guaranteeing a quality of service (QoS), the apparatus comprising:

a monitoring block for monitoring the number of handoff drops versus the number of occurred handoff calls for an initial  $L_p$  term;

a comparator for comparing a monitoring result with the target handoff dropping probability; and

an adjusting block for adjusting the admission threshold according to a comparison result output from the comparator;

wherein the monitoring block monitors a successive  $L_p$  term, while changing a value of a second term  $S_p$  until the target handoff dropping probability is satisfied during the second term  $S_p$ , which is longer than or equal to the initial  $L_p$  term and includes the initial  $L_p$  term, the comparator and the adjusting block performing corresponding operations according to the comparison result.

9. (Amended) A method for adaptively adjusting an admission threshold in a wireless network including a plurality of cells, wherein [one of] a [mobile] base station controller associated with a particular cell of the plurality of cells [or a mobile switching center (MSC)] adaptively adjusts the admission threshold for determining whether to admit or drop a handoff call requested [for] from a cell adjacent to one of the cells in communication with [the] a mobile station, to satisfy a target handoff dropping probability for guaranteeing a quality of service (QoS), the method comprising the steps of:

(b) monitoring the number of handoff drops versus the number of occurred handoff calls for an initial  $L_p$  term;

- (c) adjusting the admission threshold according to the monitoring result;
- (d) transmitting a message for adjusting an admission threshold [of] **from** the cells adjacent to said one adjacent cell according to adjustment of the admission threshold; and
- (e) repeating the steps (b) to (d) for a successive  $L_p$  term, while changing a value of a second term  $S_p$  until the target handoff dropping probability is satisfied during the second term  $S_p$  which is longer than or equal to the initial  $L_p$  term and includes the initial  $L_p$  term.

13. (Amedned) An apparatus for adaptively adjusting an admission threshold in a wireless network including a plurality of cells, wherein [one of] a [mobile] **base station controller associated with a particular cell of the plurality of cells [or a mobile switching center (MSC)]** adaptively adjusts the admission threshold for determining whether to admit or drop a handoff call requested [for] **from** a cell adjacent to one of the cells in communication with [the] **a** mobile station, to satisfy a target handoff dropping probability for guaranteeing a quality of service (QoS), the apparatus comprising:

a monitoring block for monitoring the number of handoff drops versus the number of occurred handoff calls for an initial  $L_p$  term;

a comparator for comparing the monitoring result with the target handoff dropping probability;

an adjusting block for adjusting the admission threshold according to a comparison result output from the comparator; and

a message transmission block for transmitting a message for adjusting an admission threshold [of] **from** the cells adjacent to said one adjacent cell according to an adjustment of the admission threshold;

wherein the monitoring block monitors a successive  $L_p$  term, while changing a value of a second term  $S_p$  until the target handoff dropping probability is satisfied during the second term  $S_p$ , which is

longer than or equal to the initial  $L_p$  term and includes the initial  $L_p$  term, and the comparator, the adjusting block and the message transmission block perform corresponding operations according to the comparison result.

17. (Amended) A method for controlling admission of a requested handoff call in a wireless network including a plurality of cells, wherein **[one of] a [mobile] base station controller associated with a particular cell of the plurality of cells [or a mobile switching center (MSC)]** controls admission of the requested handoff call, when a handoff call is requested to one of a plurality of cells adjacent to one of the cells in communication with **[the] a** mobile station, the method comprising the steps of:

(a) upon receipt of a new call request to the adjacent cell, comparing a sum of an allocated bandwidth of said adjacent cell and a bandwidth for the requested new call with an admission threshold of said adjacent cell, and determining whether to admit or block the requested new call;

(b) monitoring the number of handoff drops versus the number of requested handoff calls for an initial  $L_p$  term;

(c) adjusting the admission threshold according to the monitoring result and a target handoff dropping probability for guaranteeing a quality of service (QoS);

(d) transmitting a message for adjusting an admission threshold **[of] from** the cells adjacent to said one adjacent cell according to adjustment of the admission threshold; and

(e) repeating the steps (b) to (d) for a successive  $L_p$  term, while changing a value of a second term  $S_p$  until a target call blocking probability is satisfied during the second term  $S_p$  which is longer than or equal to the initial  $L_p$  term and includes the initial  $L_p$  term.

22. (Amended) An apparatus for controlling admission of a requested handoff call in a wireless network including a plurality of cells, wherein **[one of] a [mobile] base station station associated with a particular cell of the plurality of cells** [or a mobile switching center (MSC)] controls admission of the requested handoff call, when a handoff call is requested to one of a plurality of cells adjacent to one of the cells in communication with [the] **a** mobile station, the method comprising the steps of:

a call admitting/dropping decision block for comparing, upon receipt of a new call request to the adjacent cell, a sum of an allocated bandwidth of said adjacent cell and a bandwidth for the requested new call with an admission threshold of said adjacent cell, and determining whether to admit or block the requested new call;

a monitoring block for monitoring the number of handoff drops versus the number of requested handoff calls for an initial  $L_p$  term;

a comparator for comparing the monitoring result with a target handoff dropping probability for guaranteeing a quality of service (QoS);

an adjusting block for adjusting the admission threshold according to the comparison result;

a message transmission block for transmitting a message for adjusting an admission threshold [of] **from** the cells adjacent to said one adjacent cell according to adjustment of the admission threshold; and

a monitoring block for monitoring a successive  $L_p$  term, while changing a value of a second term  $S_p$  until a target call blocking probability is satisfied during the second term  $S_p$  which is longer than or equal to the initial  $L_p$  term and includes the initial  $L_p$  term.